



THE CITY OF SAN DIEGO

## HOW TO OBTAIN A PERMIT FOR INSTALLATION OF

# Solar Photovoltaic Systems

CITY OF SAN DIEGO DEVELOPMENT SERVICES

1222 FIRST AVENUE, MS 401 SAN DIEGO, CA 92101-4101

CALL (619) 446-5300 FOR APPOINTMENTS AND (619) 446-5000 FOR INFORMATION

INFORMATION  
BULLETIN

**301**

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This information bulletin is published to guide you through the permit process for renewable energy projects, particularly Solar Photovoltaic Systems (PV). It also provides information about submittal requirements, plan reviews, project inspections and required fees.

### I. APPROVAL REQUIREMENTS

An Electrical Permit is required for the installation of all PV systems. A building permit, or combination permit for installations on single family dwellings or duplex projects, may be required if structural modifications to existing construction are proposed to support the PV system.

A building permit, or combination permit for installations on single family dwellings or duplex projects, is required for all new structures such as trellises, patio covers, canopies, platforms etc. that support PV systems when such structures would otherwise be exempt from a building permit per Section §129.0203.

PV systems shall comply with all applicable requirements, City ordinances and regulations including zoning, structure height, FAA notification and condition of prior development permits governing the site.

### II. SUBMITTAL REQUIREMENTS

The following plans and documents shall be provided along with the appropriate fees.

#### A. Application Package

Provide one copy of the General Application (DS-3032).

#### B. Plans

1. Residential installations per Plan Template. The template was developed to guide you in preparing residential solar PV plans. This template shall be used only for a residential PV project when installed on a sloped roof with the panel weight of 5 pounds per square foot or less. This plan template may be used as a general guideline to prepare residential solar PV plans. Provide the following at your appointment:

- Two copies of the plans per PV Plan Template sheets PV-1, PV-2, and PV-3. The plan template sheets shall be modified to reflect the actual project-specific details.
- One copy of manufacturer's specifications for the proposed PV panels with all electrical information.

### Documents referenced in this Information Bulletin

- San Diego Municipal Code, ([SDMC](#))
- [Information Bulletin 122](#), How to Prepare a Single Dwelling Unit Site Plan and Vicinity Map
- [Information Bulletin 501](#), Fee Schedule Construction Permits - Structures
- [Information Bulletin 581](#), Designated Historical Resource Review
- General Application, [DS-3032](#)
- [Inspection Guidelines & Suggested Practices](#)
- [Residential Plan Template for Solar Photovoltaic](#)
- [PV Plan Template 1](#)
- [PV Plan Template 2](#)
- [PV Plan Template 3](#)

- c. One copy of manufacturer's specifications for the proposed PV inverter(s) showing all electrical information.

2. Commercial installations and residential installation where the Residential Plan Template cannot be used; provide two sets of each of the following plans and documents:

#### a. Site Plan

The site plan for ground mounted PV system needs to show property lines and setback dimensions. For roof mounted PV systems, provide a plan showing the footprint of the building and the location of the PV system on the building or structure. The plans should also include the site address, legal description, assessor's parcel number, and property owner name/address. See Information Bulletin 122 for a sample site plan.

- b. A plan showing the location of all existing and proposed PV panels, AC or DC combiners, all disconnects inverters and main electrical service.
- c. An electrical one-line diagram showing the number of photovoltaic panels with voltage and kilowatt output, all disconnects, all combiners, all inverters with input and output ratings, the size of the main electrical panel bussing in amperes, the size of the main service disconnect, the size of the PV circuit breaker in amperes, size and type of all raceways and the size and type of all conductors.
- d. Manufacturer's specifications for the proposed PV panels with all electrical information (one copy).

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Upon request, this information is available in alternative formats for persons with disabilities.

- e. Manufacturer's specifications for the proposed inverter showing all electrical information (one copy).
- f. Framing plans showing either the supporting structure for ground mounted arrays and/or the attachment of the panels to the roof. If using pre-manufactured racking systems provide the manufacturer's installation specifications.
- g. A Cross-section showing the height of the proposed PV panel, the supporting structure and the height above the roof for roof mounted PV panels.
- h. Where alterations are required to existing structures to support and provide an attachment for PV systems, structural plans shall be provided that are sufficient in detail and scope to demonstrate the required load path to ground. Structural calculations may be required for the following:
  - i. Roof or structure mounted PV systems if the weight of the PV system exceeds five pounds per square foot.
  - ii. PV panels mounted more than 30 inches above the roof.
  - iii. Ground mounted PV systems located more than 5 ft. above the ground.

All plans shall be signed and stamped in accordance with the California Business and Professions Code. Plans may be signed and stamped by a registered electrical engineer or a licensed electrical contractor (C-10 License) or a solar contractor (C-46 License) who is responsible for the installation of the system: A general contractor (B-License) may also sign and stamp the plans only if the PV Panels are installed in a new building or new addition area.

A registered architect, civil engineer or structural engineer shall sign structural plans and calculations when required.

### III. OTHER REQUIREMENTS

Applicants proposing to install or modify a photovoltaic system on a premises containing a designated historical resource or within a historic district must meet with Historical Resources staff in <http://www.sandiego.gov/planning/programs/historical/> prior to submittal of the project to the Development Services Department. Historical Resources staff will work with the applicant to reduce to the extent possible any adverse impact to the historical property through project design and location. Historical Resources staff will then stamp the plans as conforming to the San Diego Municipal Code and will recommend application of the State Historic Building Code. There is no charge for this meeting and review of photovoltaic projects by Historical Resources staff (see Information Bulletin 581).

### IV. OPTIONS FOR REVIEW PROCESS

- A. All commercial PV projects must be submitted. All residential PV projects which are not prepared as per the Residential PV Plan Template must be submitted. Appointments to submit applications and plans are recommended and can be made by calling (619) 446-5300.
- B. Residential PV projects prepared in accordance with the City of San Diego Residential PV Plan Template will be reviewed over the counter by appointment.

### V. PLAN REVIEWS

Plans for PV systems require a review for compliance with the California Electrical Code as well as City zoning and land development regulations. Additionally, a structural review will be required when PV systems exceed the weight and mounting height limits requiring structural calculations in Section II above.

Both over the counter and submitted structural reviews are available, however the availability of over the counter reviews can be limited due to staffing and workload constraints. The Structural counter supervisor will make the determination of whether the review of the PV system attachment and support can be performed over the counter.

### VI. FEES

#### A. Residential Submitted

Issuance/with Plans.....	\$38
Travel-documentation .....	\$49
Records Fee .....	\$20
First System/Inverter Plan Check .....	\$169
First System/Inverter Inspection .....	\$169

#### B. Residential Per City of San Diego Residential PV Plan Template

Issuance/with Plans.....	\$38
Travel-documentation .....	\$49
Records Fee .....	\$20
First System/Inverter Plan Check .....	\$108
First System/Inverter Inspection .....	\$169

#### C. Commercial

Issuance/with Plans.....	\$133
Travel-documentation .....	\$49
Records Fee .....	\$60
First 100 Kw Plan Check .....	\$324
Each Additional 100 Kw Plan Check .....	\$113
First 100 Kw Inspection .....	\$253
Each Additional 100 Kw Inspection .....	\$98

If a building or combination permit or additional reviews such as structural reviews are required, additional plan review fees or permit fees may be required and will be charged based on an hourly rate (see Information Bulletin 501).

**VII. INSPECTIONS**

For additional helpful information on inspections, please refer to the Residential Photovoltaic Systems Inspection Guidelines.

Required inspections may include: Electrical Underground; Electrical Rough; Electrical Final; Structural-Foundation; Structural-Rough and Structural-Final.

After receiving final inspection approval for all related City of San Diego Approvals (permits), SDG&E will be notified. The system is not approved to energize until SDG&E approval is obtained.